

March 23, 1984

Dear Light-Duty Manufacturer:

CD-84-3(LD)

Subject: Changes to Certification Input Data Forms for Model
Year 1985

This letter transmits to you information about changes made to the certification input data sheets. Regulation changes require modification of some format specifications and additional data fields, while other modifications are intended to speed and simplify the processing of manufacturer certification requests. The following provides an overview of the information being changed or added to the existing data sheet formats. Enclosure I includes field descriptions and instructions for coding the changed or added fields. Copies of the modified input data sheets are also enclosed. The new forms are upward compatible with the 1984 model year forms and replace those being used now. These amended data sheets with complete information will be included in the 1985 Data Supplement for the Certification Application Format.

The new regulations for light-duty trucks (LDT's) specify the "useful-life" of the vehicle to be 120,000 miles and the deterioration factors to be determined by the manufacturer and submitted to EPA. The useful-life mileage of 120,000 miles makes the previous entry of information on the Engine System Information Sheet for "Major Scheduled Maintenance Mileage Points" obsolete because six digits would be required when maintenance point mileages are greater than 99,999 miles. To support this change, the fields on the input data sheet remain the same, however, the terminology for specifying the mileage points is revised.

The deterioration factors for 1985 LDT's (including vehicles certified only for sale in California and other cases where special deterioration factors are used) are to be submitted using the Special DF/Vehicle Mileage Sensor Identifier data sheet. The changes to this data sheet (Card 1) allow deterioration factors to be entered under a durability vehicle or an engine family system number. The entry under engine family system number should be used when a single vehicle's test points

are not relied upon to calculate the deterioration factors. If

the deterioration factor is specially calculated for other than 1985 LDT's, the certification team must be notified prior to the submission of the data.

Other changes to the certification input data sheets include a new card being added to the "Engine System Information Sheet" (Card E7). The first field on the new card, the "Prime" field, indicates whether the engine family is targeted as a likely candidate to be certified and the second field, "DF Outlier," identifies whether the deterioration factor outlier procedure option will be used for the categories light-duty vehicle and light-duty truck. The remaining fields are sets of standards against which this engine family system is to be certified, including Federal (include waivers), California (with a methane option indicator), and high-altitude standards.

The "Manufacturer Test Data Sheet" (Card B) includes the addition of four new fields. The first is a site code which expands the "Test Lab Code." The second, "Non-Methane HC," will provide HC results for California engine families being optionally certified against the non-methane standards. The remaining two fields, "System" and "Odometer," will expand the system and/or odometer miles fields above the maximum entry of 99,999 miles.

The "Vehicle Test Data Sheet" (Card A) for EPA testing is revised for the addition of a new field "Reason for Confirmation" to indicate the reason for confirmatory testing at EPA.

Sincerely yours,

Robert E. Maxwell, Director
Certification Division
Office of Mobile Sources

Enclosures

Enclosure I

Changes to Certification Data Entry Forms

The certification. data entry forms being changed are:

- Engine System Information Sheet
- Special DF/Vehicle Mileage Sensor Identifier
- Manufacturer's Test Data Sheet
- Vehicle Test Data Sheet (EPA tests)

The changes include expanding the use of some existing fields and adding new input cards and fields to several of the input data sheets used by manufacturers to submit data to EPA. The following describes the fields being changed and added:

Engine System Information Sheet

Card E1, Columns 60-79, "MAJOR SCHEDULED MAINTENANCE MILEAGE POINTS"

The use definitions are changed for these fields to accommodate more than 4 points, (needed when the vehicle's useful-life is greater than 99,999 miles). Rather than change the existing format and require truncated data to be entered, it is convenient to change the field use definitions since most manufacturers are already using them in the following manner:

- 1) When only one point is entered, it will be taken as an interval value to be repeated to the useful life of the vehicle.
- 2) When 2 points are entered, the first point will be taken as the initial maintenance point with the second as a repeating interval.
- 3) When 3 points are entered, the first point will be the initial maintenance point with the next 2 points as the repeating intervals.
- 4) When all 4 points are entered, the maintenance schedule is expected to be satisfied. Maintenance schedules not compatible with the use definitions should be described in the comments on Card E6.

Examples:

1 point = 15000	= repeating interval of 15000 miles.
2 points = 1000 15000	= first point is initial, second is repeating.
3 points = 1000 12500 35000	= first point is initial, second and third are repeating.

Card E6, Columns 3-80, "EPA USE ONLY" Field is Renamed "COMMENTS"

Comments may be entered for the engine family system.

Card E7 (All New Card), Column 1, "PRIME"

The "Prime" field is added to indicate that an engine family is targeted as a likely candidate to be certified out of a group of similar engine families. A "Y" or "N" should be entered for yes or no. If all similar engine families are equally likely to be certified, any engine family may be selected. This field need not be updated to reflect changes in plans. This field will assist EPA in projecting workloads.

Card E7, Column 2, "DF OUTLIER"

The DF Outlier field is added to this data sheet to eliminate confusion associated with the prior instructions for the manufacturer to notify the certification team if deterioration factors (d.f.'s) were to be calculated using the outlier procedure for light-duty vehicles (LDV's) or light-duty trucks (LDT's). A "Y", "N" or blank may be entered with interpretations of "Y" = yes, "N" = no and blank = no. If the outlier procedure is to be used for either the LDV or LDT class, a "Y" must be entered in this field for the first engine family system certified in that class. Recalculated deterioration factor reports will be generated for all previously calculated deterioration factors in the class when a different procedure is requested. If a "Y" is not entered for the first engine family system certified, the outlier procedure will not be used for that class. If an error condition occurs the certification team should be notified that the computer program rejected the DF outlier procedure request.

Card E7, Columns 6-24, "FEDERAL STANDARDS"

The Federal standards for which this engine family will be certified are to be entered. If a waiver is granted for any emission, the waiver standard would be entered here. This entry applies to Federal and 50-state engine families. If this field is left blank and the "Sales Code" field has a "B" or "F" entered, the normal Federal standards which do not include waivers will be entered by the computer program. The input values for the standards will be retained in EPA's data base to the number of places to satisfy the requirement of 2 significant figures. If more places are entered to the right of the

decimal than should be, they will be ignored on input with an appropriate message stating this occurred. The standards submitted here are system specific and will be used to determine pass/fail reports and facilitate future automation of test disposition assignments. This information replaces information requested in the application format.

Card E7,-Columns 26-45, "CALIFORNIA STANDARDS"

The California standards are being requested to identify the appropriate standards for vehicles being certified in the State of California. The Methane field identifies whether the methane option for HC is in effect or not for this engine family. If the entry is "Y" for yes, the standard and the deterioration factor for HC are expected to be a non-methane value. An error condition will occur if the "Sales Code" field has a value of "B" or "C" and this field is blank.

Card E7, Columns 47-61, "HIGH ALTITUDE STANDARDS"

This will indicate the standards being certified under and also identify this engine family to be included for High-Altitude certification. The input values for the standards will be retained in EPA's data base to the number of places to satisfy the requirement of 2 significant figures. If more places are entered to the right of the decimal than should be, they will be ignored on input with an appropriate message stating this occurred. If the family is only certified at high altitude, only this field is used. It is left blank if the family is not certified at high altitude.

Special DF/Vehicle Mileage Sensor Identifier Input Data Sheet

Card 1, Columns 5-20, "DURA VID" Field is Renamed "DURA VID/ENGINE FAMILY"

Additional deterioration factors will be derived by means other than durability vehicle test points. The 1985 LDT regulations require that a manufacturer determine and submit the deterioration factor to EPA. This field is currently titled "DURA VID" and requires a vehicle description to be entered into the VI data base. By expanding this field to include the entry of engine family name a vehicle description will not have to be fabricated and entered into the computer system.

Card 1, Column 21, "EF-VID"

A new field used to identify whether an engine family or vehicle ID is being entered. An "E" should be entered to specify engine family name or a "V" to specify vehicle ID. If the field is blank, the default value will be a "V".

Card 1, Column 24, A New Field Titled "SYS#"

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This field indicates the engine family system number for use with the engine family name. No entry is required for this field if a durability vehicle ID is entered in the "DURA VID/ENGINE FAMILY" field.

Card 1, Column 30, A New Field Titled "CALIFORNIA"

This field indicates that the deterioration factor on this form is submitted for California only. The deterioration factor must be submitted with either an engine family name or vehicle I.D. and will be used to determine pass/fail for California vehicles. If the "Engine System Information" has identified the engine family system as California or 50-state, deterioration factors must be entered on this form. EPA's computer program for calculating deterioration factors will not attempt to calculate California deterioration factors because of different methods of calculation.

Card 1, Columns 38-39, "DF CODE"

Two new codes, "04", (full useful-life 120,000 miles) and code "05" (other full useful-life) are added to the existing code list and apply to Model Year 1985 LDT's.

Note: This input data sheet must be used to input all 1985 LDT and California deterioration factors by the manufacturer. This input format will be added into the manufacturers electronic data transmission batch processing system. The input data set to be created on the manufacturers' MTS account is "1020W" and the report data set is "1020R". These data sets must be permitted "FULL" to EPA's MTS account "SAQR".

Manufacturers Test Data Sheet

Card B, Columns 48-51, "NON-METHANE HC"

Non-methane HC is being requested on test data for emission-data vehicles (EDV) under a California or 50-state engine family with the methane option for California. This information will be used to determine the pass/fail of an EDV test for California summary sheet reports.

Card B, Column 52, "System"

Card B, Column 53, "Odometer"

The "System" and "Odometer" fields are added to allow entry of a factor code which will indicate that system miles and/or odometer miles are greater than 99,999 miles. These field values will be used in a calculation of the form:

New Odometer Miles = "Odometer" Code x 100,000 + Entered Odometer Miles.

New System Miles = "System" Code x 100,000 + Entered System Miles

Example: New System Miles = "System" Code x 100,000 + Entered System Miles.

$$120,000 = 1 \times 100,000 + 20,000$$

Vehicle Test Data Sheet (EPA Tests)

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Card A, Columns 46-47, "REASON FOR CONFIRMATION"

Card A is completed by the manufacturer and submitted to EPA for test number assignment.

This field will identify the reason the vehicle is being confirmatory tested at EPA. The code to enter will be indicated by the certification team, usually on a test waiver request sheet. Available codes are:

01 = Random Audit

02 = Failure at Mfr
03 = Cert Level Equal Standards
04 = FE is greater than or equal to
Leader
05 = FE up by 1 or more
06 = New Vehicle, no data
07 = FE Correlation Offset
99 Other reason

FOR ATTACHED DATA SHEETS, REFER TO FILES

CD8403_1.PCX THROUGH CD8403_7.PCX